

Tuesday, November 08, 2016 3:27:09 PM

Item ID: 647.7306

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Stop *NS2*

Start Date: 11/9/2016 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 11/11/2016 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: *VS* / *MX* Date: *10/11/18*

Tooling: _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

SPC (Y/N): _____ Date: _____

Stop ***NR2***

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 153175

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153175

Page 2

Item ID: 647.7306 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)
Start Date: 11/9/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 11/11/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 647.7306 Location : FG109 <i>sold</i>								
140	QC21- Final Inspection - Work Order Release	0.00							
140	Memo	0.00							
QC									
Quality Control									

Handwritten stamps:
DAS 27 9-89
NOV 10 2016
DAS 21 9-89
NOV 11 2016
DAS 21 9-89
NOV 11 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Page 1

Work Order ID: 153175

153175

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 11/9/2016

Required Date: 11/11/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 16.04.27 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
600.1012 *600 1012* Sealant PR1425B2 (#654 sem)		Purchased	No				Each	16.0000		1			
**													
				<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>				
				cck017			16						
				m135407			1						
				m135600			5						
				m135840			10						
601.2045 *601 2045* RTV (LOCTITE 598)		Purchased	No				Each	12.0000		1			
**													
				<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>				
				CCK096			4						
				m135628			4						
				GA			8						
				m134260			8						
601.3011 *601 3011* P-Seal		Manufactured	No				f	67.1000		1.4			
**													
				<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>				
				CCK095			50						
				91709			50						
				CCK099			17.1						
				M130388			17.1						

CUT AT 16.00"

DAS
27
9-89

Exp date
01/01/2017

DAS
27
9-89

DAS
27
9-89

DAS
27
9-89

NOV 08 2016

DAS
6
9-89

DAS
26
9-89

NOV 08 2016

DAS
6
9-89

DAS
26
9-89

NOV 08 2016

DAS
6
9-89

DAS
26
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																							
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Root Cause		FAULT CATEGORY																																																													
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
OTHER : _____																																																															

Picklist Print

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Page 2

Work Order ID: 153175

153175

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 11/9/2016

Required Date: 11/11/2016

Start Qty: 1.00

Required Qty: 1.00

601.3902

Manufactured No

Each 5.0000

601 3902

Eye Bolt

**

2 NOV 08 2016

DAS
6
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

cck101

5

147212

5

647.0112

Manufactured No

Each 77.0000

647 0112

Strut Bracket

**

NOV 08 2016

DAS
6
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

CCK107

77

150114

42

150895

15

151352

20

647.1404

Manufactured No

Each 1.0000

647 1404

Upper Cutter Assembly

**

NOV 08 2016

DAS
6
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

CCK048

1

146728

1

647.1702

Manufactured No

Each 2.0000

647 1702

Skid Deflector Assembly

**

NOV 08 2016

DAS
6
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

CCK033

2

147340

2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							

Picklist Print

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Tuesday, November 08, 2016 3:27:16 PM

Work Order ID: 153175

153175

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 11/9/2016

Required Date: 11/11/2016

Start Qty: 1.00

Required Qty: 1.00

647.7501 Manufactured No

Each 1.0000

1

647 7501

Lower Cutter Assembly

**

NOV 08 2016

Location

Loc Qty

Loc Code

cck001

1

146726

1

647.7701 Manufactured No

Each 3.0000

2

647 7701

Strut Assembly

**

NOV 08 2016

Location

Loc Qty

Loc Code

CCK114

3

146722

3

647.7702 Manufactured No

Each 7.0000

2

647 7702

Strut Assembly

**

NOV 08 2016

Location

Loc Qty

Loc Code

CCK076

7

146723

7

93635A212 Purchased No

Each 38.0000

4

93635A212

Bolt

**

NOV 08 2016

Location

Loc Qty

Loc Code

ST558

38

m134700

38

Tuesday, November 08, 2016 3:27:16 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
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Picklist Print

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Work Order ID: 153175

153175

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 11/9/2016

Required Date: 11/11/2016

Start Qty: 1.00

Required Qty: 1.00

AN3-11A Purchased No Each 112.0000

AN3-11A

Bolt

**

NOV 08 2016

DAS 6 9-89

DAS 26 9-89

Location	Loc Qty	Loc Code
over003	100	
m135767	100	
ST349	12	
m135390	12	

4

AN316C4R Purchased No Each 21.0000

AN316C4R

Nut, Jam

**

NOV 08 2016

DAS 6 9-89

DAS 26 9-89

Location	Loc Qty	Loc Code
ST331	21	
m133234	1	
m135840	20	

1
3

AN44-12A Purchased No Each 26.0000

AN44-12A

Eyebolt

**

NOV 08 2016

DAS 6 9-89

DAS 26 9-89

Location	Loc Qty	Loc Code
ST339	26	
124131	6	
124263	20	

2X

AN4C7A Purchased No Each 104.0000

AN4C7A

BOLT

**

NOV 08 2016

DAS 6 9-89

DAS 26 9-89

Location	Loc Qty	Loc Code
OVER002	70	
m135864	70	
ST345	34	
m135470	34	

4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Picklist Print

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Work Order ID: 153175

153175

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 11/9/2016

Required Date: 11/11/2016

Start Qty: 1.00

Required Qty: 1.00

AN665-34R Purchased No

Each 31.0000

4

AN665-34R

Clevis

**

NOV 08 2016

DAS 6 26 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

ST330

31

M135603

11

M135948

20

4

LN9025-0820K

Purchased No

Each

8.0000

8

I N9025-0820K

Lock Tab Washer

**

NOV 08 2016

DAS 6 26 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

ST563

8

M128007

8

8

LN9037-08018

Purchased No

Each

0.0000

8

I N9037-08018

Screw

**

NOV 11 2016

DAS 6 26 9-89

MS21042-08

MS21042L08

Purchased No

Each

0.0000

4

MS21042-08

USE MS21042L08

**

NOV 08 2016

DAS 6 26 9-89

MS21042-3

MS21042L3

Purchased No

Each

0.0000

4

MS21042-3

Nut

**

NOV 08 2016

DAS 6 26 9-89

DAS 27 9-89

Tuesday, November 08, 2016 3:27:16 PM

Shop Packet Print

Page 5

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
SAG 3 780				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Tuesday, November 08, 2016 3:27:16 PM

Work Order ID: 153175

153175

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 11/9/2016

Required Date: 11/11/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L08

Purchased

No

Each

1,060.000

5

MS21042I 08

Nut

NOV 08 2016

DAS
6
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

GA

50

m135274

50

ST303

1010

m135672 *13*

10

m135766

200

m135948

300

m135978

500

5_____

MS21042L4

Purchased

No

Each

2,152.000

4

MS21042I 4

Nut

NOV 08 2016

DAS
6
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

FP001

34

m133363

34

GA

204

m135058

204

OVER007

500

m135979

500

ST303

1414

m135704

46

m135774

368

m135864

1000

4_____

MS21266-2N

Purchased

No

Each

49.0000

1

MS21266-2N

Grommet

NOV 08 2016

DAS
6
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

ST294

49

123900

40

M130388

9

1_____

Tuesday, November 08, 2016 3:27:16 PM

Shop Packet Print

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Picklist Print

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Work Order ID: 153175

153175

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 11/9/2016

Required Date: 11/11/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-08-13

Purchased

No

Each

80.0000

4

MS27039-08-13

Screw

**

NOV 08 2016

Location

Loc Qty

Loc Code

ST278

80

124326

80

Each

35.0000

5

MS27039-08-27

Purchased

No

MS27039-08-27

Screw

**

NOV 08 2016

Location

Loc Qty

Loc Code

ST277

35

m134702

35

Each

2,822.000

8

NAS1149F0332P

Purchased

No

NAS1149F0332P

Washer

**

NOV 08 2016

Location

Loc Qty

Loc Code

GA

276

m133709

276

ST260a

2000

m135948

2000

ST262

546

m135544

546

Each

1,371.000

12

NAS1149F0432P

Purchased

No

NAS1149F0432P

WASHER

**

NOV 08 2016

Location

Loc Qty

Loc Code

ST260a

1000

M135704

1000

ST262

371

M134955

371

Tuesday, November 08, 2016 3:27:16 PM

Shop Packet Print

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																											
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Picklist Print

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Page 8

Work Order ID: 153175

153175

Parent Item: 647.7306

647 7306

Parent Item Name: EC135 T2/P2 Cable Cutters (Removable Provisions Only)

Start Date: 11/9/2016

Required Date: 11/11/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0463P

Purchased

No

Each

660.0000

8

NAS1149F0463P

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

ST262

660

m127832

660

Each

2,430.000

2

NAS1149F0532P

Purchased

No

NAS1149F0532P

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

ST260a

600

m133725

600

ST262

1830

18057

1830

Each

1,519.000

23

NAS1149FN832P

Purchased

No

NAS1149FN832P

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

1389

M133769

89

M135058

1300

ST263

130

M135603

130

910Z 8 0 AON DAS 6 9-89

910Z 8 0 AON DAS 6 9-89

910Z 8 0 AON DAS 6 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																			
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Description Work Order Deviation			Disposition																																																																				
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			Lead hand / Supervisor Approval Verification																																																																				
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Root Cause <table style="width:100%; border: none;"> <tr> <td style="border: none;">Environment ☐</td> <td style="border: none;">No Re-verification ☐</td> <td style="border: none;">Pressure/Forced ☐</td> </tr> <tr> <td style="border: none;">Design ☐</td> <td style="border: none;">Operator ☐</td> <td style="border: none;">Bending ☐</td> </tr> <tr> <td style="border: none;">Doc/Data ☐</td> <td style="border: none;">Offset/Setup ☐</td> <td style="border: none;">Centre Not Concentric ☐</td> </tr> <tr> <td style="border: none;">Equip/Tooling ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;">Cracks ☐</td> </tr> <tr> <td style="border: none;">Handling/Pre ☐</td> <td style="border: none;">Training ☐</td> <td style="border: none;">Crimp/Kink/Ripple/Wave ☐</td> </tr> <tr> <td style="border: none;">Material ☐</td> <td style="border: none;">Use for Testing ☐</td> <td style="border: none;">Cuffs ☐</td> </tr> <tr> <td style="border: none;">Internal Transport ☐</td> <td style="border: none;">Poor Information ☐</td> <td style="border: none;">Crushing ☐</td> </tr> <tr> <td style="border: none;">Tribal Knowledge ☐</td> <td style="border: none;">Rushing ☐</td> <td style="border: none;">Heat Treat ☐</td> </tr> <tr> <td style="border: none;">LOA ☐</td> <td style="border: none;">Product Improvement ☐</td> <td style="border: none;">Wave/Twist in Tube ☐</td> </tr> <tr> <td style="border: none;">Substation ☐</td> <td style="border: none;">Process Improvement ☐</td> <td style="border: none;">Marks/Chatter ☐</td> </tr> <tr> <td style="border: none;">Past Expiry Date ☐</td> <td style="border: none;">Manufacturing Process ☐</td> <td></td> </tr> <tr> <td style="border: none;">Misidentified ☐</td> <td style="border: none;">Past Due ☐</td> <td></td> </tr> </table>			Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Design ☐	Operator ☐	Bending ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Past Expiry Date ☐	Manufacturing Process ☐		Misidentified ☐	Past Due ☐		FAULT CATEGORY <table style="width:100%; border: none;"> <tr> <td style="border: none;">Temperature/Cure ☐</td> <td style="border: none;">Power Loss/Surge ☐</td> <td style="border: none;">Positioned Wrong ☐</td> </tr> <tr> <td style="border: none;">Set-up ☐</td> <td style="border: none;">Folio/Program ☐</td> <td style="border: none;">Outside Dimensions ☐</td> </tr> <tr> <td style="border: none;">BOM/Route ☐</td> <td style="border: none;">Grain ☐</td> <td style="border: none;">Over/Under tolerance ☐</td> </tr> <tr> <td style="border: none;">Broken/Damage/Defect ☐</td> <td style="border: none;">Weld ☐</td> <td style="border: none;">Part Incorrect ☐</td> </tr> <tr> <td style="border: none;">Inspection Incomplete/Unqualified ☐</td> <td style="border: none;">Wrong Stock Pulled ☐</td> <td style="border: none;">Part Lost/Missing ☐</td> </tr> <tr> <td style="border: none;">Contamination ☐</td> <td style="border: none;">Out of Sequence ☐</td> <td style="border: none;">Part Moved ☐</td> </tr> <tr> <td style="border: none;">Countersink ☐</td> <td style="border: none;">Off-set ☐</td> <td style="border: none;">Drawing ☐</td> </tr> <tr> <td style="border: none;">Cut Too Short ☐</td> <td style="border: none;">Mislabeled ☐</td> <td style="border: none;">Finish ☐</td> </tr> <tr> <td style="border: none;">Instructions Incomplete/Unclear ☐</td> <td style="border: none;">Fit/Function ☐</td> <td style="border: none;">Misread ☐</td> </tr> <tr> <td style="border: none;">Drill Holes ☐</td> <td style="border: none;">Misaligned/off center ☐</td> <td style="border: none;">Turning Sequence ☐</td> </tr> </table>			Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Countersink ☐	Off-set ☐	Drawing ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
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OTHER : _____																																																																							

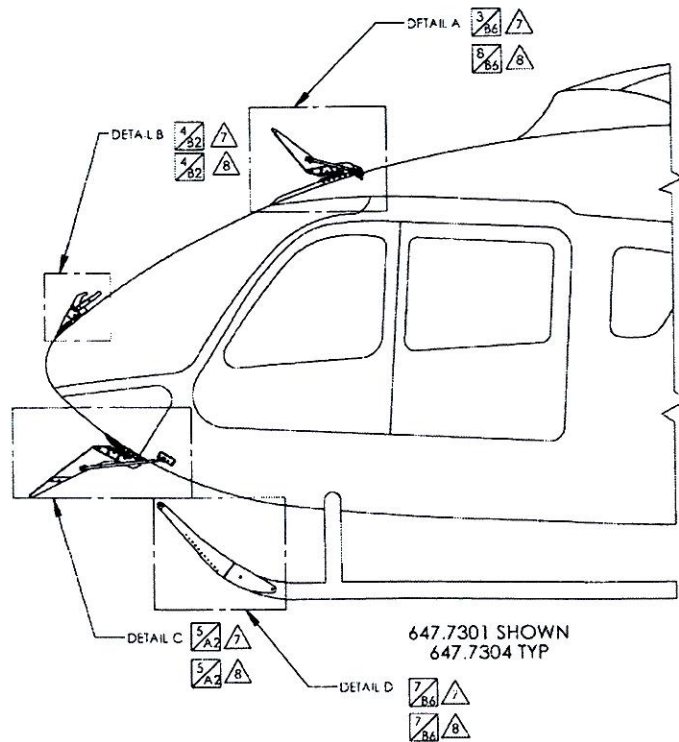
$$\frac{v_{12}}{152} = 11/8$$



Work Order update only ☐

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework ☐		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
NCR No. _____		Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Use-as-is ☐		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Suspected Unapproved ☐		Large Fab ☐	Composite ☐	Supplier ☐			
Date : _____		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process								
Misidentified ☐	☐ Past Due	OTHER :							

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2	2					110	601.3902	EYE BOLT		
	2	2				109	601.2910	SCREW	MS27039-1-18	
4		4				108	601.3963	BOLT	93635A212	
8		8				107	601.3654	BOLT	LN9037-05018	
8		8				106	601.3655	LOCK WASHER	LN9025-0620K	
2		2				105	647.1702	SKID DEFLECTOR ASSY		
	8	8		8	8	104	601.3214	CHERRY RIVET	CR3525-53	
	24	24		24	24	103	601.3213	CHERRY RIVET	CR3525-44	
	4	4		4	4	102	601.3212	CHERRY RIVET	CR3523-40	
5		5				101	601.1541	LOCKNUT	MS27040-08	
5		5				100	601.3962	SCREW	MS27039-052	
1		1				99	647.1404	CUTTER ASSY (UPPER)		
1		1				98	647.2114	UPPER U CHANNEL		
1		1				97	647.7823	CROSS BRACKET AFT		
1		1		1	1	96	647.5701	GPS MOUNT KIT		
7306	7305	7304	7303	7302	7301	FIND	PART #	DESCRIPTION	MAT'L	SPEC

ORIGINAL DATE
1/20/00
DRAWN BY
A. OLAN
CHECKED
D. BAKER
IN APPROPRIATE APPROVAL
P. BRAY
5/11/02
CONTRACT NO.

DART 3030 ENTERPRISE CT.
AEROSPACE SUITE A
VISTA, CA 92081
APICAL INDUSTRIES, INC.
DART AEROSPACE (760) 724-5300

EC135 CABLE CUTTERS KIT

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMALS
3 PLACES DECIMALS ±.01
ANGLES ±.5°

SHEET 0001 DWG NO. 647.7300 REV. 8
SCALE NONE SHEET 2 OF 8

DQA: _____ Date: _____



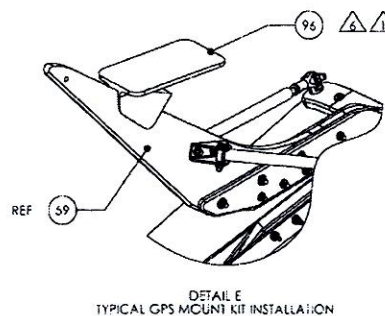
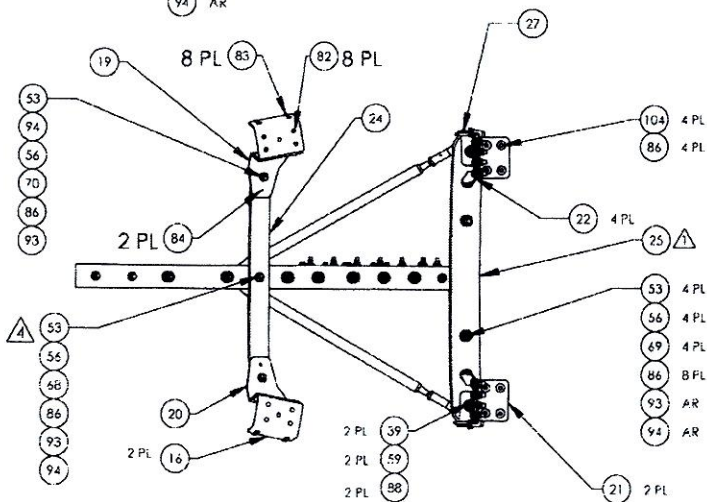
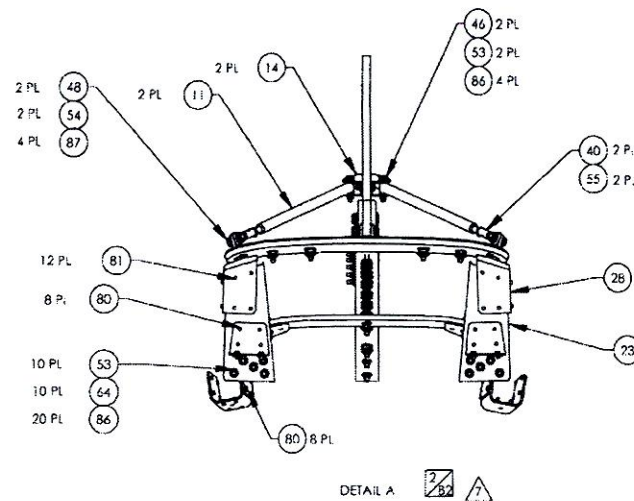
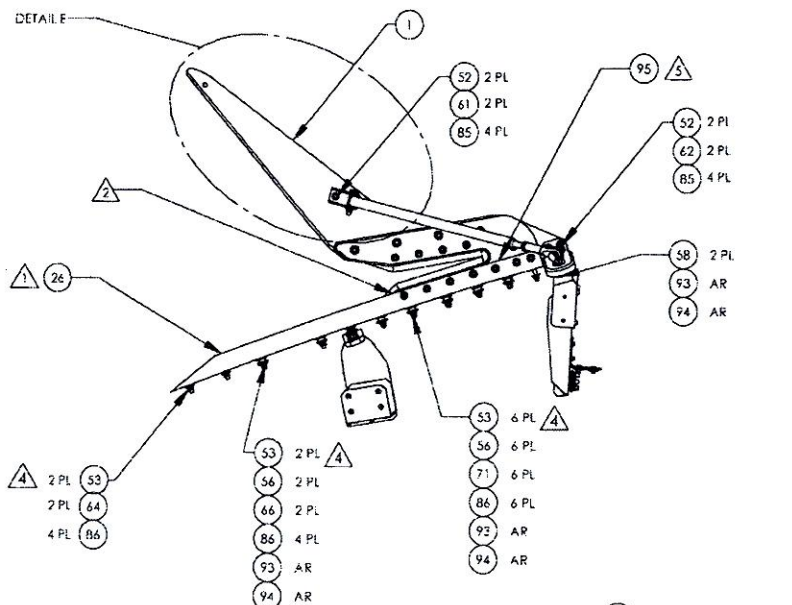
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.



ORIGINAL DATE: 11/20/05		DRAWN BY: CHUCKIEP		A. QUINN	
DRAWING APPROVAL: P. BIANCO		CHECKED: J. HANSEN		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°					
CAGE CODE: 647.7300		DWG. NO.: 647.7300		SHEET 3 OF 8	
SCALE: NONE		SHEET: 3 OF 8		SHEET: 3 OF 8	

DART 3030 ENTERPRISE CT.
SUITE A
AEROSPACE VISTA, CA. 92081
APICAL INDUSTRIES INC.
(760) 724-5300

EC135 CABLE CUTTERS KIT

DQA: _____ Date: _____



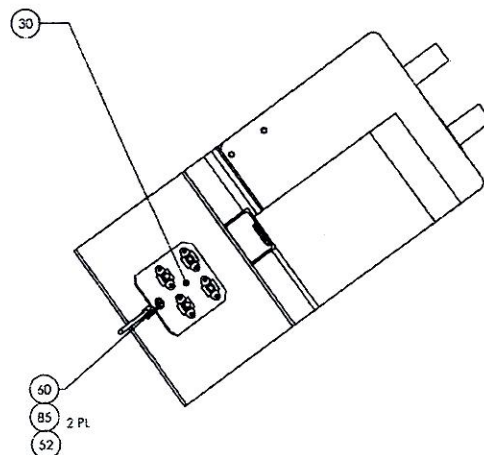
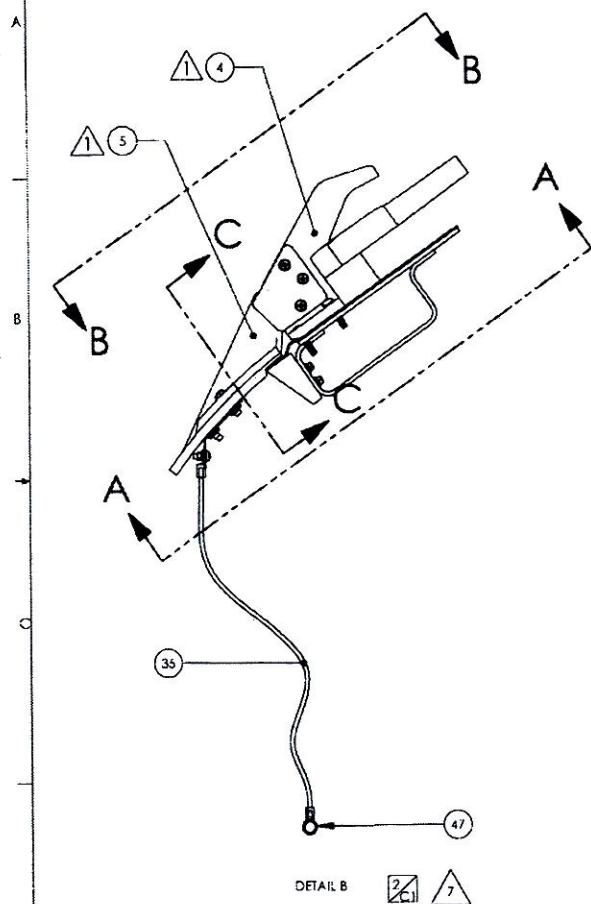
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

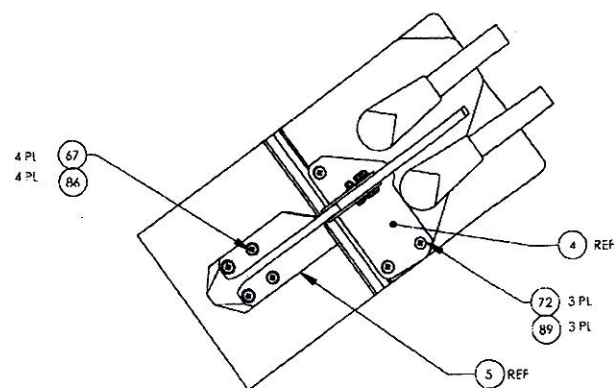
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
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Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
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Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
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Past Expiry Date ☐	☐ Manufacturing Process	OTHER :							
Misidentified ☐	☐ Past Due								

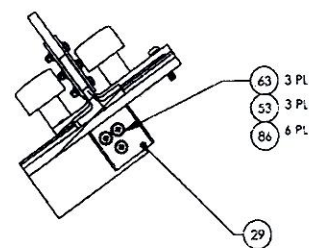
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SECTION A-A



SECTION B-B



SECTION C-C

DOWNSIDE DATE (MM-DD-YY) 11/20/09		DART 3030 ENTERPRISE CT. SUITE A VISTA, CA 92081 (760) 724-5300	
DRAWN BY A. CHAM		CHECKED D. BARNES	
DRAWING APPROVAL P. BARNES		SUITE 10	
CONTRACT NO.		EC135 CABLE CUTTERS KIT	
SET B	CAGE CODE 07M16	QTY 1	REV. 8
SCALE NONE		SHEET 4 OF 8	

DQA: _____ Date: _____



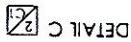
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
		OTHER :			

1514

[illegible]

DQA: _____ Date: _____



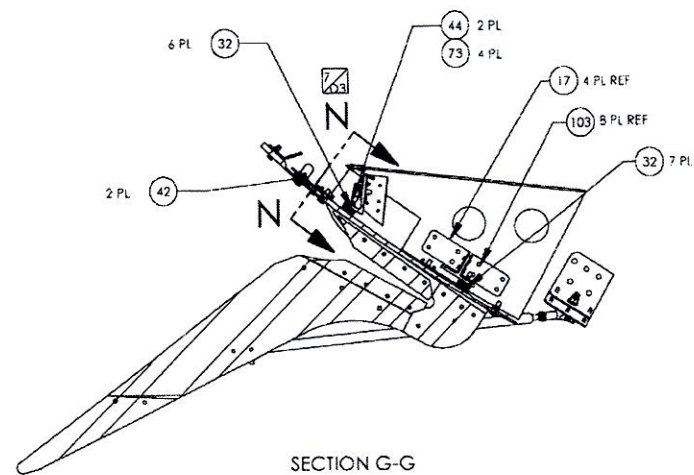
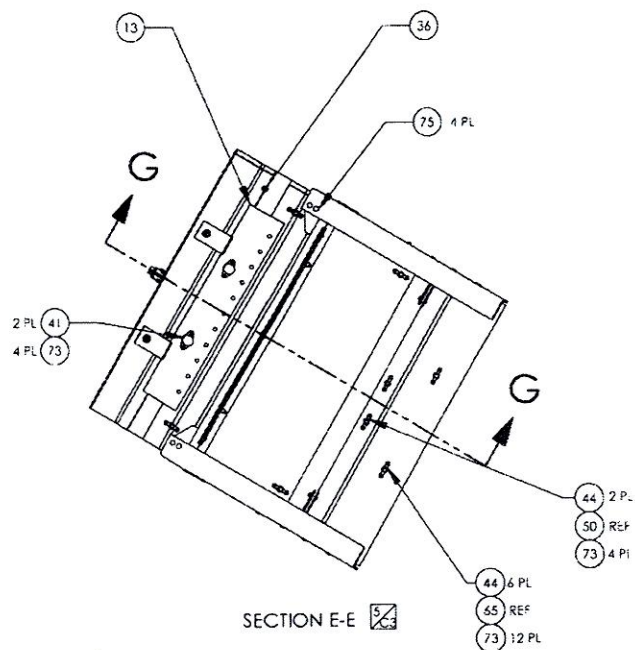
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																			
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DART 3030 ENTERPRISE CT. AEROSPACE SUITE A VISTA, CA 92081 (760) 774-5300	
EC135 CABLE CUTTERS KIT	
ORDER NO. 07M26	DATE 07/26/06
DRAWN BY A. CLARK	CHECKED BY D. BAKER
DRAWING APPROVAL 18.0000	
CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE 2 PLACES DECIMALS ±.01 3 PLACES DECIMALS ±.001 ANGLES ±.5°	SCALE NONE SHEET 5 OF 8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

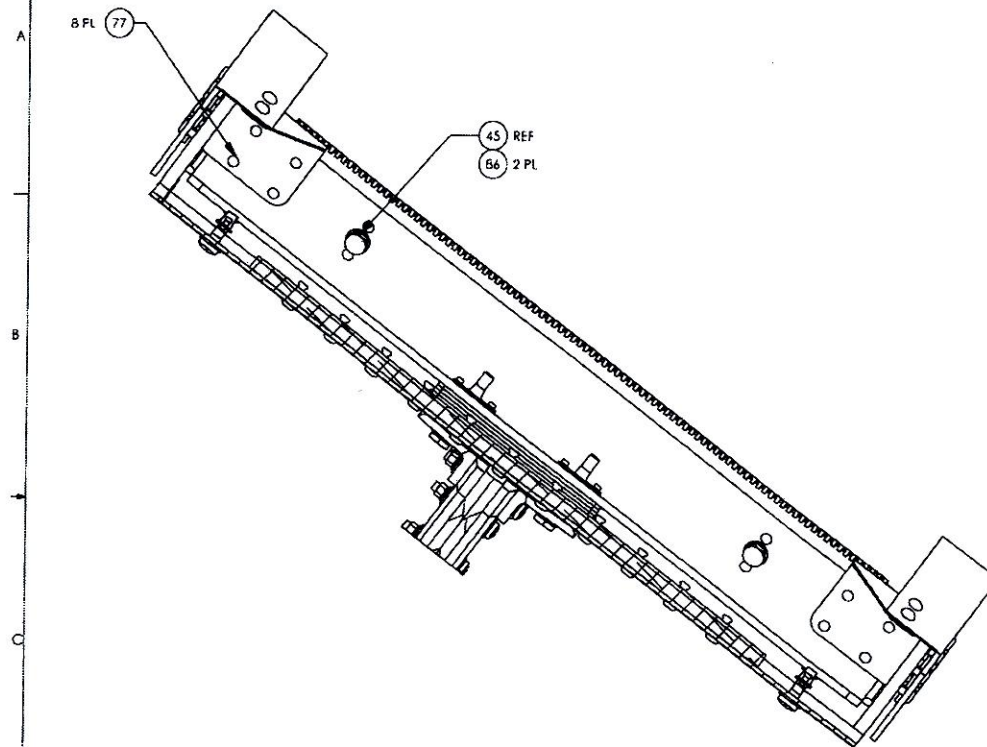
QA Closed: _____ Date: _____

Work Order update only ☐

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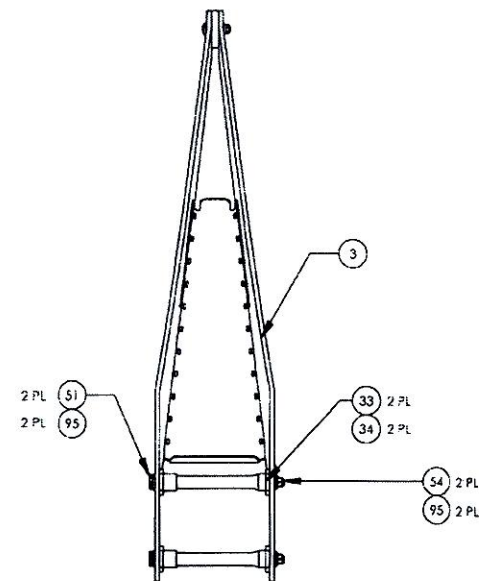
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SECTION N-N

INBOARD



DETAIL D
TYP 2 PL

ORIGINAL DATE 1/1/2006		DART 3030 ENTERPRISE CT., SUITE A	
DRAWN BY A. GUNA		VISTA, CA. 92081	
CHECKED BY C. HARRIS		(760) 724-5300	
DRAWING APPROVAL E. BRAY		APICAL INDUSTRIES INC. DBA DART AEROSPACE	
CONTRACT NO.		EC135 CABLE CUTTERS KIT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		REV. 3 07M26 647 7300 B	SHEET 7 OF 8
SCALE NONE			

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

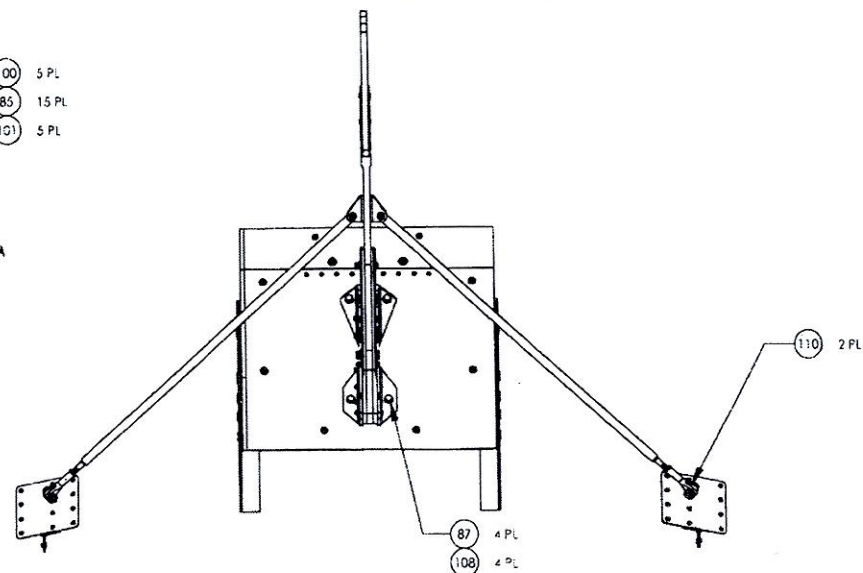
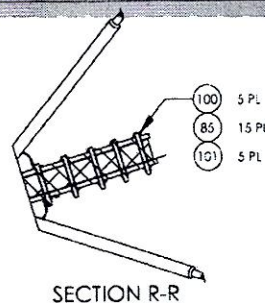
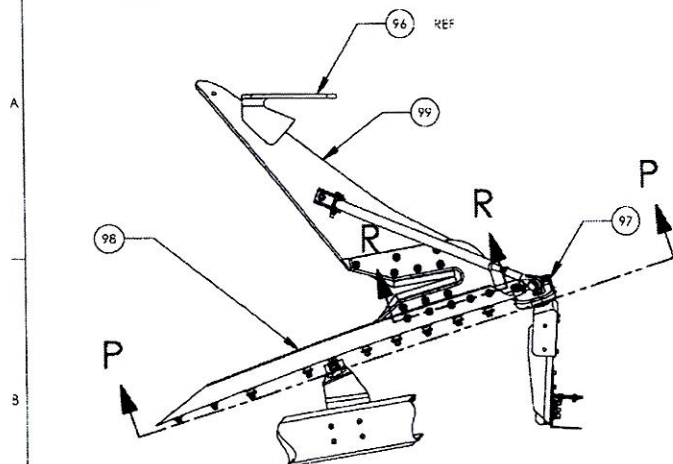
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																		
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval																	
Description Work Order Deviation		Disposition		Completed By																	
				Lead hand / Supervisor Approval Verification																	
				QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																
OTHER :																					

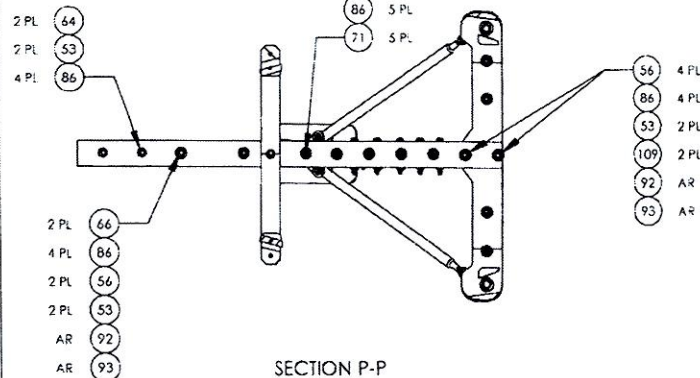
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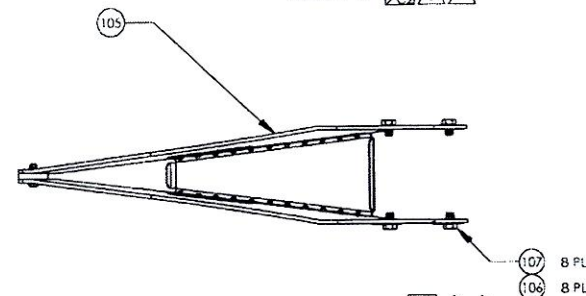
DETAIL A

- 93 AR
- 92 AR
- 53 5 PL
- 56 5 PL
- 86 5 PL
- 71 5 PL



SECTION P-P

DETAIL C



DETAIL D

ORIGINAL DATE 11/20/99		3030 ENTERPRISE CT. SUITE A VISTA, CA 92081 (760) 724-5300	
DRAWN BY A. OMAN		D. BARNER	
DRAWING APPROVAL 01/13/02			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE 2 PLACE DECIMALS ANGLES ARE 5°		EC135 CABLE CUTTERS KIT	
SHEET 3	OF 07M26	DWG. NO. 647.7300	REV B
SCALE NONE		SHEET 8 OF 8	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐						
Date : _____		Step #: _____		QTY Effective : _____		MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				
								Completed By
								Lead hand / Supervisor Approval Verification
								QC / QA Coordinator Approval
Root Cause		FAULT CATEGORY						
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____		

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NOTES: UNLESS OTHERWISE SPECIFIED

1. AFTER INSTALLATION, APPLY F/N 90 A/R TO FILL GAPS AND FILLET EDGES.
2. APPLY F/N 91 TO FAYING SURFACES.
3. DELETED.
4. MATCH DRILL HOLES THROUGH F/N 26 or F/N 98 AND FUSELAGE.
5. SHIM GAP BETWEEN F/N 1 & 26 AS NEEDED.
6. AT CUSTOMERS OPTION, INSTALL F/N 96 BY MATCH DRILLING ONTO F/N 1 FOR KIT P/N 647.7301 or F/N 99 FOR KIT P/N 647.7304.
7. 647.7301 INSTALLATION FOR EC135.
8. 647.7304 INSTALLATION FOR EC135 T2/P2.
9. EXCEPT WHERE NOTED, INSTALLATION FOR 647.7304 SAME AS 647.7301.

UNINCORPORATED ECN(S)

054105

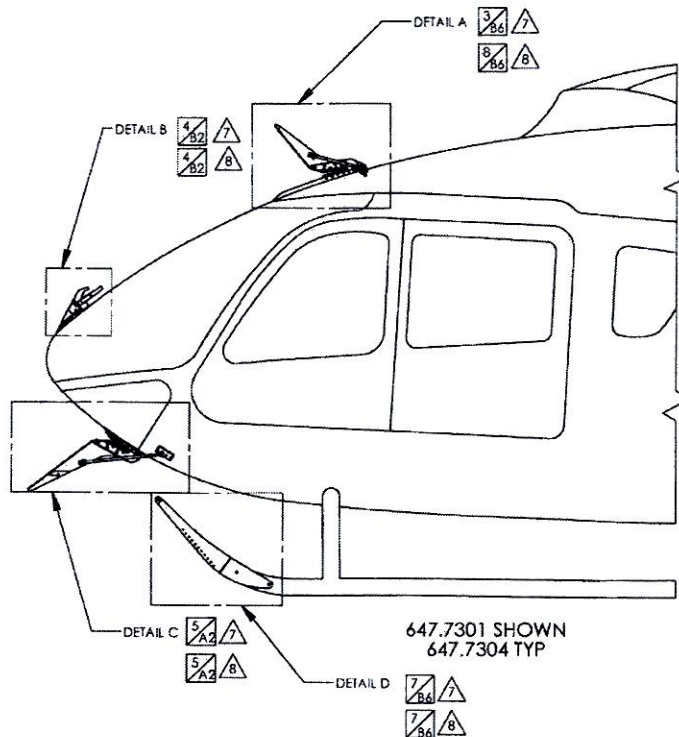
				8		8	95	601.1097	WASHER	NAS1149FO463P
	1	1		1	1	94	647.7919	SHIM		
	1	1		1	1	93	600.0990	MAGNOBOND 6398 PART A		
	1	1		1	1	92	600.0991	MAGNOBOND 6398 PART B		
1		1	1		1	91	601.2045	RTV	LOC8E 898	
1	1	1		1	1	90	600.1012	SEALANT	PK-1425 CLASP 8	
	3	3		3	3	89	601.2375	WASHER		
2	3	4	2	3	4	88	601.3126	WASHER	NAS1149FO532P	
12		12	8		8	87	601.3663	WASHER	NAS1149CD432R	
8	77	85	12	74	86	86	601.1.607	WASHER	NAS1149FO030P	
23	2	25	12	2	14	85	601.2764	WASHER	NAS1149FN832P	
	2	2		2	2	84	601.3136	CHERRY RIVET	CR3212-5-6	
	8	8		8	8	83	601.3215	CHERRY RIVET	CR3522-5-3	
	8	8		8	8	82	601.3216	CHERRY RIVET	CR3522-4-3	
	12	12		12	12	81	601.2481	CHERRY RIVET	CR3213-5-4	
	16	16		16	16	80	601.2020	CHERRY RIVET	CR3213-5-3	
	17	17		17	17	79	601.2991	CHERRY RIVET	CR3213-4-6	
	8	8		8	8	78	601.1183	CHERRY RIVET	CR3213-4-5	
	16	16		16	16	77	601.1915	CHERRY RIVET	CR3213-4-4	
	24	24		24	24	76	601.0790	CHERRY RIVET	CR3213-4-3	
	4	4		4	4	75	601.1604	CHERRY RIVET	CR3213-4-2	
	4	4		4	4	74	601.1983	NUTPLATE RIVET	CCR27433-3-03	
	24	24		24	24	73	601.2207	NUTPLATE RIVET	CCR27433-3-03	
	3	3		3	3	72	601.2999	SCREW		
	5	5		6	6	71	601.2829	SCREW	MS22469-4554	
	2	2		2	2	70	601.1954	SCREW	MS22039-1-17	
	4	4		4	4	69	601.2637	SCREW	MS22039-1-16	
	1	1		1	1	68	601.3012	SCREW	MS22039-1-15	
	4	4		4	4	67	601.1622	SCREW	MS22039-1-14	
	2	2		2	2	66	601.1953	SCREW	MS22039-1-12	
	6	6		6	6	65	601.1365	SCREW	MS22039-1-10	
	12	12		12	12	64	601.3069	SCREW	MS22039-1-09	
	3	3		3	3	63	601.2198	SCREW	MS22039-1-07	
			2		2	62	601.3137	SCREW	MS22039-0814	
4		4	4		4	61	601.2988	SCREW	MS22039-0813	
	1	1		1	1	60	601.2525	SCREW	MS22039-0807	
	4	4		4	4	59	601.3127	LOCKNUT	MS21042-5	
	2	2		2	2	58	647.8512	INSERT		
	4	4		4	4	57	647.8511	INSERT		
	20	20		18	18	56	647.8510	INSERT		
4		4	4		4	55	601.3128	NUT	AN318C4R	
4		4	8		8	54	601.3209	LOCKNUT	MS21042-4	
4	31	35	4	30	34	53	601.2943	LOCKNUT	MS21042-3	
4	1	5	6	1	7	52	601.2973	LOCKNUT	MS21042-06	
			4		4	51	601.3002	BOLT	HA56604-66	
			4		4	50	601.3130	BOLT	HA56603-16	
			4		4	49	601.1500	BOLT	HA56603-12	
4		4	4		4	48	601.2669	BOLT	ANAC7A	
	1	1		1	1	47	601.1324	BOLT	ANAC46A	
4		4	4		4	46	601.2826	BOLT	AN3-11A	
	2	2		2	2	45	601.2823	BOLT	AT5-4A	
	12	12		12	12	44	600.0795	NUTPLATE	MS21047-3	
	2	2		2	2	43	601.3004	CAMLOC STUD		
	2	2		2	2	42	601.3005	CAMLOC RETAINER		
	2	2		2	2	41	601.3006	CAMLOC RECEPTACLE		
4		4	4		4	40	601.3119	CLEVIS	AN665-34R	
7306	7305	7304	7303	7302	7301	FIND #	PART #	DESCRIPTION	MATL	SPEC

										REV. NO.		DESCRIPTION		DATE		APPROVED	
										LAST PROTOTYPE REVISION PER						N/C	
										INITIAL RELEASE				01/13/09		P. BRAVO	
										INCORPORATED LOTS 20348, 03000, 03044, 03064				02/14/11		P. BRAVO	
										INCORPORATED LOTS 03085				03/09/16		P. BRAVO	
2		2	2			2	39	601.3120	EYE BOLT				ANMA-12A				
			2			2	38	601.3121	EYE BOLT				ANMA-5A				
1	1	1	1	1	1	1	37	601.3007	GROMMET				MS1266-24				
1	1	1	1	1	1	1	36	601.3011	P-SEAL								
	1	1				1	35	647.3201	GROUNDING CABLE ASSY								
			2	2	4	4	34	647.2511	NUT								
					4	4	33	647.2510	SLEEVE								
	13	13			13	13	32	647.1812	SHIM								
	2	2			2	2	31	647.1811	SPACER								
	1	1			1	1	30	647.1602	DOUBLER ASSY								
	1	1			1	1	29	647.1914	BRACKET								
	1	1			1	1	28	647.7822	EYE BOLT FITTING RH								
	1	1			1	1	27	647.7821	EYE BOLT FITTING LH								
					1	1	26	647.7818	MOUNTING CHANNEL								
					1	1	25	647.7820	CROSS BRACKET AFT								
	1	1			1	1	24	647.7819	CROSS BRACKET FWD								
	1	1			1	1	23	647.7918	BRACKET								
	1	1			1	1	22	647.7917	BRACKET								
	2	2			2	2	21	647.7916	BRACKET								
	1	1			1	1	20	647.7915	BRACKET								
	1	1			1	1	19	647.7914	BRACKET								
	2	2			2	2	18	647.7913	DOUBLER								
	4	4			4	4	17	647.7912	CLIP								
	2	2			2	2	16	647.7911	BRACKET								
	2	2			2	2	15	647.7910	ANGLE BRACKET								
4		4	4		4	4	14	647.0112	STRUT BRACKET								
	1	1			1	1	13	647.1810	NOSE DOOR DOUBLER								
	1	1			1	1	12	647.1818	NOSE DOOR SPACER								
2		2	2		2	2	11	647.7701	STRUT ASSY								
2		2	2		2	2	10	647.7702	STRUT ASSY								
	1	1			1	1	9	647.1815	GUSSET, RH								
	1	1			1	1	8	647.1814	GUSSET, LH								
	1	1			1	1	7	647.1915	SUPPORT ANGLE								
	1	1			1	1	6	647.1913	TEE								
	1	1			1	1	5	647.1610	WIPER DEFLECTOR, FWD								
	1	1			1	1	4	647.1601	WIPER DEFLECTOR ASSY, AFT								
			2		2	3	3	647.1701	SKID DEFLECTOR ASSY								
1		1	1		1	2	2	647.7501	LOWER CUTTER ASSY								
			1		1	1	1	647.7401	UPPER CUTTER ASSY								
X								647.7306	T2/P2 REMOVABLE PROVISIONS KIT								
	X							647.7305	T2/P2 FIXED PROVISIONS KIT								
		X						647.7304	EC135 T2/P2 CABLE CUTTERS KIT								
			X					647.7303	REMOVABLE PROVISIONS KIT								
				X				647.7302	FIXED PROVISIONS KIT								
					X			647.7301	EC135 CABLE CUTTERS KIT								
7306	7305	7304	7303	7302	7301	FIND #	PART #	DESCRIPTION			MATL			SPEC			
QTY							PARTS LIST										
NEXT ASSY (S)							ORIGINAL DATE 11/24/09 DRAWN BY CRECHER P. GUY CHECKED J. BAKER DRAWING APPROVAL P. BRAVO DATE 02/14/11 CONTRACT NO.										
REVISIONS							UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 3 PLACE DECIMALS ±0.1 3 PLACE DECIMALS 2.005 ANGLES ± 5°										
DART							3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300										
ARRADSPACE							ARICAL INDUSTRIES INC. 850 DART AIRSPACE										
EC135 CABLE CUTTERS KIT							SEE CAGE CODE DWG. NO. REV. B 07M26 647.7300 1 SHEET NONE OF 8										

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2		2				110	601.3902	EYE BOLT		
	2	2				109	601.2910	SCREW		
4		4				108	601.3963	BOLT		MS27039-1-18
8		8				107	601.3654	BOLT		956354212
8		8				106	601.3655	LOCK WASHER		UN93037-08018
2		2				105	647.1702	SKID DEFLECTOR ASSY		UN9025-0820K
	8	8		8	8	104	601.3214	CHERRY RIVET		CR3302-6-3
	24	24		24	24	103	601.3213	CHERRY RIVET		CR3302-4-4
	4	4		4	4	102	601.3212	CHERRY RIVET		CR3302-4-3
5		5				101	601.1541	LOCKNUT		MS27040-08
5		5				100	601.3962	SCREW		MS27037-0827
1		1				99	647.1404	CUTTER ASSY (UPPER)		
	1	1				98	647.2114	UPPER U CHANNEL		
	1	1				97	647.7823	CROSS BRACKET AFT		
1		1		1	1	96	647.5701	GPS MOUNT KIT		
7306	7305	7304	7303	7302	7301	PART # DESCRIPTION MAT'L SPEC				

ORIGINAL DATE 11/24/09
DRAWN BY A. CLAN
CHECKED D. BARETH
DRAWING APPROVAL P. BARETH
DATE 01/10/10
CONTRACT NO.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

DART
AEROSPACE
APICAL INDUSTRIES, INC.
DBA DART AEROSPACE
3030 ENTERPRISE CT.,
SUITE A
VISTA, CA. 92081
(760) 724-5300

EC135 CABLE CUTTERS KIT

REV. B
SCALE NONE
SHEET 2 OF 8